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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number	09/825,820
Filing Date	04/04/2001
First Named Inventor	Eric J. Horvitz
Art Unit	2611
Examiner Name	Harun M. Yimam
Attorney Docket Number	MS150904.01/MSFTP161US

Sheet		U. S. PATENT D	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant
xaminer Cit	B Document Number	MM-DD-YYYY	Applicant of Cited Document	Figures Appear
itials* No	Number-Kind Code ^{2 (# known)}	01-28-2003	Abbott, III et al.	
fort	US- 6,513,046	06-08-2004	Abbott et al.	
my	US- 6,747,675	10-05-2004	Abbott et al.	
my	US- 6,801,223	01-11-2005	Robarts et al.	
hay	US- 6,842,877	10-15-2002	Newell et al.	
my	US- 6,466,232	04-15-2003	Abbott, III et al.	
my	US- 6,549,915	09-14-2004	Abbott et al.	
har	US- 6,791,580	11-02-2004	Abbott et al.	
thrul	US- 6,812,937	11-15-2001	Abbott et al.	
Hmy 1	US- 2001/0040591	11-22-2001	Abbott et al.	
than	US- 2001/0043232	04-18-2002	Abbott, III et al.	
Hury	US- 2002/0044152 US- 2002/0052963	05-02-2002	Abbott et al.	
HM	US- 2002/0054174	05-09-2002	Abbott et al.	
Huy	US- 2002/0080155	06-27-2002	Abbott et al.	
tray	US- 2002/0083025	06-27-2002	Robarts et al. Abbott et al.	
thay	US- 2002/0087525	07-04-2002	Abbott et al.	
Hay	US- 2003/0046401	03-06-2003	Abbott et al.	
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HMY	FOREIGN PATEN	DOCUMENTS	7
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Substitute for form 1449A/PTO SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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itials* No.	Number-Kind Code ^{2 (# known)}	11-15-2001	Abbott et al.	
Im	US- 2001/0040590	11-22-2001	Abbott et al.	
ray	US- 2001/0043231		Abbott, III et al.	
	US- 2002/0032689	03-14-2002	Abbott et al.	
my	US- 2002/0052930	05-02-2002	Abbott, III et al.	
trans	US- 2002/0054130	05-09-2002	Newell et al.	
tund	US- 2002/0078204	06-20-2002	Abbott et al.	
me	US- 2002/0080156	06-27-2002		
tunt	US- 2002/0083158	06-27-2002	Abbott et al.	
my	US- 2002/0099817	07-25-2002	Abbott et al.	
Hory		08-14-2003	Abbott, III et al.	
Hull	US- 2003/0154476	02-11-1997	Theimer et al.	
thay	US- 5,603,054	09-10-1996	Theimer et al.	
HMY	US- 5,555,376	03-11-1997	Theimer et al.	
Huy	US- 5,611,050	08-06-1996	Theimer et al.	
HM	US- 5,544,321	02-20-1996	Theimer et al.	
Hny	US- 5,493,692			
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nitials*	No.1	the item (book, magazine, journal, senal, symposium, catalog, symposium	
tunt		pp. 62-70.	
my		GUANLING CHEN, et al., A Survey of Context-Aware Mobile Computing Research, Dartmouth Computer Science Technical Report, 2000, 16 pages.	
	-	WILLIAM NOAH SCHILT, A System Architecture for Context-Aware Mobile Computing, Columbia University, 1995, 153 pages.	
Hmy		MIKE SPREITZER, et al., Providing Location Information in a Ubiquitous Computing Environment, SIGOPS '93, 1993, pp.270-283.	
Hmy	-	MARVIN THEIMER, et al., Operating System Issues for PDAs, In Fourth Workshop on Workstation	
Huy	-	Operating Systems, 1993, 1993. ROY WANT, Active Badges and Personal Interactive Computing Objects, IEEE Transactions on Consumer Electronics, 1992, 11 pages, Vol. 38 - No. 1.	
Huy		BILL N. SCHILIT, et al., The ParcTab Mobile Computing System, IEEE WWOS-IV, 1993, 4 pages.	
41107	,	BILL SCHILIT, et al., Context-Aware Computing Applications, In Proceedings of the Workshop on Mobile Computing Systems and Applications, December 1994. pp. 85-90.	
How		BILL N. SCHILIT, et al., Customizing Mobile Applications, Proceedings USENIX Symposium on Mobile and Location Independent Computing, August 1993, 9 pages.	-
Hm	u l	MIKE SPREITZER, et al., Architectural Considerations for Scalable, Secure, Mobile Computing with Location Information, In The 14th International Conference on Distributed Computing Systems June 1994, dages 29-38.	3.
L	سليد	Date	

June 1994, dages 29-38.		
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Complete if Known Under the Paperwork Reduction 1995, no peu-Substitute for form 1449/PTO **Application Number** 09/825,820 SUPPLEMENTAL 04/04/2001 Filing Date INFORMATION DISCLOSURE First Named Inventor STATEMENT BY APPLICANT Eric J. Horvitz 2611 Art Unit (Use as many sheets as necessary) Harun M. Yimam **Examiner Name** MS150904.01/MSFTP161US Attorney Docket Number 5 of 4 Sheet

xaminer	Cite	NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), date, pa	T ²
nitials*	No.1	number(s), businers, Mobile Computing with Location Information,	
100.11		Communications of the ACM, say 1999,	
tmy		ROY WANT, et al., The Active Badge Location System, ACM Transactions on Information Systems, January 1992, pp. 91-102, Vol. 10 - No. 1.	L
tmy		MARK WEISER, Some Computer Science Issues in Ubiquitous Computing, Communications of the ACM, July 1993, pp. 75-84, Vol. 36 - No. 7.	
Hny		M. BILLINGHURST, et al., An Evaluation of Wearable Information Spaces, Proceedings of the Virtual Reality Annual International Symposium, 1998, 8 pages.	
Hry		BRADLEY J. RHODES, Remembrance Agent: A continuously running automated information retrieval system, The Proceedings of The First International Conference on The Practical retrieval system, The Proceedings of Multi Agent Technology, 1996, pp. 487-495.	
HMY	-	Application Of Intelligent Agents on the Handsfree Decision Support: Coupling Bayesian ERIC HORVITZ, et al., In Pursuit of Effective Handsfree Decision Support: Coupling Bayesian Inference, Speech Understanding, and User Models, 1995, 8 pages.	
Hay		BRADLEY J. RHODES, The Wearable Remembrance Agent: A System for Augmented Theory, The Proceedings of The First International Symposium on Wearable Computers, October 1997, pp	
Hory		123-128. ERIC HORVITZ, et al., Attention-Sensitive Alerting in Computing Systems, Microsoft Research, August 1999.	
Hu	1	BILL N. SCHILIT, et al., Disseminationg Active Map Information to Mobile Hosts, IEEE Network, 1994, pages 22-32, Vol. 8 - No. 5.	-
Huy	- -	MARK BILLINGHURST, et al., Wearable Devices: New Ways to Manage Information, IEEE Computer Society, January 1999, pp. 57-64.	

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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the article (when ap	T²
Hmy		THAD EUGENE STARNER, Wearable Computing and Contextual Awareness, Massacrusous Institute of Technology, June 1999, 248 pages.	
How		BRADLEY J. RHODES, The Wearable Remembrance Agent: A System for Augmented Memory, Personal Technologies Journal Special Issue on Wearable Computing, 1997, 12 pages.	
HMY		Workshop on Wearable Computing Systems, August 19-21, 1996.	
Hou		MARK BILLINGHURST, Research Directions in Wearable Computing, University of Washington, May, 1998, 48 pages.	-
tmy tmy tmy		MARK WEISER, The Computer for the 21st Century, Scientific American, September 1991, pp. 94-104, Vol. 265 - No. 3.	
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Examiner Considered

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